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THE
Philoſopher's Stone;
OR
GRAND ELIXIR,

Diſcover'd by

FRIAR BACON;

And now Publiſh'd

As a Counterpart to the *Degradation of Gold by an Anti-Elixir.*

With a few Notes, by NO ADEPT.

Sæpe latet Vitium, *proximitate* Boni.

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THE

PREFACE.

T*HE following Piece is a Tranſlation from the original* Latin *of* Roger Bacon*'s* Speculum Alchemiæ, *or* Mirror of Alchymy. *The Character of the Author is generally allow'd to be good. He was, beyond all diſpute, an extraordinary Perſon for the Age he lived in; and might have been eſteem'd ſo in any Age. It is not found that his Integrity, his Skill in the Sciences, or his Frame of Mind were ever called in queſtion; excepting that the ignorant People, of the Times he lived in, reputed him a Magician, or Conjurer: which ill-grounded Notion his excellent Writings ſufficiently conſute.*

It is poſſible, however, that he might be weak, credulous, or enthuſiaſtick, with regard to the preſent Subject; and give too eaſily into the Alchymiſtical Notions of his Predeceſſors; without having ſufficient Authority, from Experience, to authorize what is deliver'd in his Speculum Alchemiæ. *But this, perhaps, can only be determin'd by Experience itſelf; and not by any pre-conceived Theory, or Reaſoning, even upon the beſt Principles of Philoſophy hitherto known.*

That many of the ſuppoſed Alchymiſts have been Viſionaries, or Enthuſiaſts, muſt be confeſſed; we mean that they have believed, and endeavoured to propagate ſtrange Doctrines, without ſupporting them by juſt or ſufficient Reaſons, drawn from inconteſtible, and well-aſcertained Matters of Fact, or Experience: but whether all Alchymiſts ſhould be rank'd in this Claſs, and condemn'd without exception, is another Queſtion. 'Tis commonly

allow'd

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allow'd that where there are many Pretenders in the ſame way, there muſt be ſome original Thing upon which their Pretenſions are grounded.

Thus, tho' it ſhould clearly appear that thouſands have in vain pretended to make the Philoſopher's Stone, and even ruin'd themſelves in the Attempt; yet if any one Perſon ſhould, in any Age, have ſtumbled upon it by accident, or otherwiſe have made any thing like it; ſo as by means of a ſmall Quantity of Matter to produce ſtrange Meliorations of Metals, the ſingle Fact, in itſelf, is no leſs certain, than if all their Attempts had ſucceeded.

We muſt not here take it for granted that Friar Bacon *alone, among all the Number, was this happy Perſon; but ſhould carefully examine, whether, in the following Piece, he has deliver'd the thing upon his own Knowledge and Experience, or taken it upon truſt from others. For if it ſhould prove to be only taken upon truſt, it ought to have much* *leſs weight, than if it was delivered as a Fact, upon the Knowledge and Experience of a Man of unqueſtionable Veracity.*

The Motives for undertaking this little Work are theſe. The Piece appeared to be an admirable Chain of Reaſoning, conducted in a guarded manner, ſo as to ſhew, by an illuſtrious Example, in a curious Subject, the true philoſophical way of tracing the Steps of Nature in all Subjects, and endeavouring to imitate or excel her by Art. And this Manner appearing to be general, or the beſt hitherto known for the Improvement of natural Philoſophy, in a ſcientifical way; it may probably be of ſome ſervice to make it more known. This was the principal End in view; and perhaps is a thing infinitely more uſeful than the Philoſopher's Stone, or Powder of Projection: The Diſpute about the Poſſibility or Impoſſibility whereof, was only a ſecondary Conſi-

deration; which, however worthy of notice, may have been ill-managed. The Alchymiſts pretend to deliver a Matter of Fact, wrapt up, with blind Zeal, under the Veil of Figure, Allegory, Riddle, Confuſion, and ſtudied Darkneſs; which, to delicate Minds eſpecially, is apt to render things of a philoſophical Nature diſguſtful and contemptible: whence ſuch Pretenſions have, by ſober Men, been generally rejected, as the Reveries of Enthuſiaſts, or the Figments of Impoſtors. But if the Matter be juſtly weigh'd, there is a wide difference betwixt theſe ſuppoſed Alchymiſts, and their Opponents: the one aſſerting a Fact, of their own Knowledge and Experience, and the other denying the Fact; yet owning they have no Knowledge or Experience about it; nor any Conceptions of the Poſſibility of the Thing. This State of the Caſe need not be aggravated. The wiſeſt and beſt of Men may be prejudiced, and ignorant of ſome Things. And the

the Ignorant can ſurely be no Judges of what they declare themſelves ignorant of.

But it is not here propoſed to make any Defence for Alchymiſts in general, or their manner of Procedure : many of them may have been Cheats ; but this does not prove they all were ſo. Hypocrites ſcreen themſelves under the external Appearance of Religion, and Counterfeit Alchymiſts walk about under the Mask of Philoſophy ; whilſt, by an odd reverſe, thoſe eſteem'd the true ones, generally conceal themſelves under the Cover of Sophiſtry, and the Arts of Impoſtors.

To the above-mention'd Motives may be added another, ariſing from compaſſionating the Infirmities of human Nature, with regard to the preſent Subject. In all the later Ages there have been numerous Searchers after the Philoſopher's Stone ; *and we plainly find there are a few, even in our own enlighten'd Age, who hurt their*

their Fortunes by a fond Purſuit of this kind; though ſome of them have been otherwiſe worthy, ſenſible Men; but wanting the Ground-work of Philoſophy, or the Art of juſt Reaſoning in Phyſics; and being hurried away with ſtrong Impreſſions, glaring Probabilities, and golden Dreams, they raſhly attempt the moſt arduous Things in Metallurgy, without knowing the Elements of common Chymiſtry. This Procedure muſt needs appear ſtrange to all ſuch as are not under the ſame Illuſion, but conſider the Difficulties apt to occur in working after almoſt any Receipt for a common Preparation; unleſs the Operator be previouſly qualified for it by Habit or former Experience. It is remarkable, that even the Alchymiſts proceeded in a wiſer way than this; there having been few among them who had not acquired a great degree of practical Skill, in the various Branches of Chymiſtry, before *they thought of attempting Alchymy, or the Grand Elixir.*

From looking into the Writings of the Alchymiſts, it will be found, that ſome of the moſt valuable Things they appear to contain, are chiefly ſumm'd up in the following little Performance of Friar Bacon; *which, according to its Title, ſerves as a Convex* Speculum *to ſhew, in a contracted View, the principal Doctrines, and Practices of the Alchymiſts: and being written in exact Order, and a clear Stile, bating for a few Alchymiſtical Phraſes, eaſy to be decypher'd; it was no diſagreeable Task to give it in an* Engliſh *Dreſs. It is publiſh'd, at this Seaſon, in hopes that Philoſophers are prepar'd to receive it, by means of the curious Fragment of a Dialogue written by Mr.* Boyle, *and lately reprinted under the Title of* An Hiſtorical Account of a Degradation of Gold, made by an Anti-Elixir: a ſtrange Chymical Narrative, 1739, 4*to.*

The Experiment related in this Hiſtorical Account, *we alſo find in the Abridgment of Mr.* Boyle's *Works, to this effect :*

" *Weighing two Drams of Gold,*
" *I cauſed it to be cupelled with a*
" *ſufficient Quantity of Lead, and*
" *quarted with refined Silver, and*
" *purged* Aqua fortis ; *then having*
" *brought the Gold to Fuſion, in a new*
" *Crucible, carefully nealed, without*
" *the help of any Addition ; I put to*
" *it a ſmall quantity of a Powder* †,
" *communicated to me by a Stranger ;*
" *and continuing the Metal a quarter*
" *of an Hour in the Fire, that the*
" *Powder*

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† If this Powder was not of a fix'd Nature, the Experiment might be made to a conſiderable diſadvantage, by throwing ſo very minute a Quantity of it, as the eighth or tenth part of a Grain, according to the lately re-publiſh'd Account, into the Gold, whilſt melted, and detain'd, in an open Veſſel, in the Fire ; which might cauſe Avolation, Waſte, and imperfect Mixture, or ſlight Incorporation and Change. To prevent which kind of Accidents, *Friar Bacon*, at the Cloſe of the following Piece, has given a particular Direction in applying the Elixir.

“ *Powder might diffuſe itſelf through* “ *it; we poured the Metal into another Crucible, gradually heated be*“ *fore to prevent cracking; where it* “ *was obſerv'd, at the firſt, to look* “ *like pure Gold, and, afterwards,* “ *like an Opal, for ſome time; yet,* “ *when cold, it appear'd to be a Lump* “ *of Metal of a dirty Colour, and,* “ *as it were over-caſt with a thin* “ *Coat, almoſt like half vitrified Li*“ *tharge. To one ſide of the Crucible* “ *a piece of Metal ſtuck, almoſt like* “ *Silver; and the Bottom was over*“ *laid with a vitrified Subſtance, one* “ *part of which was of a tranſparent* “ *Yellow, and the other of a deep* “ *Brown, inclining to Red; in which* “ *were five or ſix little Globules, that* “ *look'd like pure Silver. Having* “ *rubbed this Metal upon a Touch*“ *ſtone, (between Gold and Silver)* “ *the Mark it left was more like Sil*“ *ver than Gold. 'Twas brittle, and* “ *being knock'd with a Hammer, it*

“ *ſlew into ſeveral pieces. The inſide*
“ *reſembled Bell-Metal more than*
“ *Gold or Silver. A Dram of it,*
“ *with about ſix times its weight of*
“ *Lead, being put upon a well-nealed*
“ *Cupel, emitted Fumes plentifully,*
“ *for an Hour and a half; and when*
“ *the Operation was ended, we found*
“ *the Cupel ſmooth, entire, and tinged*
“ *with a fine purpliſh red; and, be-*
“ *ſides the refin'd Gold, there lay upon*
“ *the Cupel ſome dark-coloured Recre-*
“ *ments, which we judged to be baſe*
“ *Metal, but not Lead. The Gold*
“ *being weigh'd again, had loſt ſeven*
“ *Grains in weight, which was made*
“ *up by the Recrements, whoſe Weight*
“ *and Fixity were ſurprizing.*

“ *The dirty-colour'd Metal, being*
“ *hydroſtatically weigh'd, inſtead of*
“ *proving nineteen times as heavy as*
“ *an equal Bulk of Water, its pro-*
“ *portion was but as fifteen, and two*
“ *thirds to One; whence it appear'd*
“ *that the Gold was really debas'd,*

“ *ſince it loſt, conſiderably, of its ſpe-*
“ *cific Gravity, and eſſential Property.*

“ *From hence it appears, that an*
“ *Operation, almoſt as ſtrange as*
“ *that call'd Projection, may be ſafely*
“ *admitted; ſince this Experiment*
“ *ſhews, that Gold, which is ſo homo-*
“ *geneous, and the leaſt mutable of*
“ *Metals, may, in a ſhort time, be*
“ *exceedingly chang'd, as to Malle-*
“ *ableneſs, Colour, Homogeneity, and*
“ *ſpecific Gravity, by ſo ſmall a Pro-*
“ *portion of Matter, that this Powder*
“ *tranſmuted a thouſand times its*
“ *Weight of Gold.*”

For farther Illuſtration of this momentous Experiment, ſee the Dialogue, of the Degradation of Gold.

As it adds ſome kind of Confirmation to the preceding Account, it may deſerve to be publickly known, that the King of France *lately gave a Princely Reward for a Secret of the ſame nature; the Experiment of* *of which was made, with the expected ſucceſs, in the Royal Preſence, by ſome able Chymiſts of his Royal Academy of Sciences at* Paris.

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FRIAR BACON's *Mirror of Alchymy.*

INTRODUCTION.

THE ancient Philoſophers had ſome reaſon to ſpeak in many different Ways throughout their Works, upon a certain Science, more noble than the reſt; ſo as to deſcribe it under the form of a Riddle, wrap it up in cloudy Expreſſions, or cover it with an impenetrable Veil of Deſpair (*a*).

(*a*) There is room to ſuſpect there was often ſome Vanity, Malevolence, or Impoſture, at the bottom of this dark Procedure; tho' the Alchymiſts

My Direction therefore is, that preferably to all other Writings, you ſhould firmly ground your Thoughts upon the ſeven following Sections, (which

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Alchymiſts take great pains to excuſe their dealing covertly with their Readers; that only ſuch as are properly qualified ſhould know the Secret: not perhaps reflecting, that there are many things, in Natural Philoſophy and Chymiſtry, as deep and dangerous as the Elixir; and yet that theſe have been divulged without much Scruple or Reſerve. Gun-Powder, Phoſphorus, exploſive Compoſitions, artificial Earthquakes, Wind-Guns, various Ways of ſophiſticating, diminiſhing, and debaſing of Metals and Coin, ſuffocating Fires and Fumes, ſecret Ways of poiſoning, deſtroying, *&c.* may be reckoned of this kind. The free and open Communication of Knowledge will be encouraged by true philoſophical Minds; whatever Courſe is taken by the Selfiſh, Malevolent, or Superſtitious. All Secrets are apt to be over-rated by their Poſſeſſors; who thus raiſe a bad kind of Merit upon the Ignorance, or Weakneſs, of other People: the contrary Procedure of our Author, and his Name-ſake, the Lord *Bacon*, Mr. *Boyle*, M. *Homberg*, and numbers of the modern *French* Philoſophers, is greatly to be commended, and deſerves to be imitated: for it is proper that Knowledge ſhou'd be increaſed; whilſt to prevent and reſtrain Wickedneſs, and pernicious Practices, belongs to Religion and Laws.

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(which contain the Secret of the Tranſmutation of Metals,) and frequently conſider the Beginning, Middle, and Concluſion of the Piece; whereby you may diſcover ſuch a Subtility, as will highly gratify the Mind (*b*).

(*b*) It is here juſtly intimated, that the mental Satisfaction which would ariſe from a Knowledge of this Secret, is its principal Uſe; as it might prove a means of conquering Prejudice, enlarging our Conceptions, and bringing us farther acquainted with the Works of Nature, and the great Power of Art, which is only Nature working by the Intervention of Man. But the Buſineſs of Tranſmutation, conſidered as an Art of making Gold to advantage, is a frivolous thing, compared to the other; and perhaps only a vain Pretence; however it may be magnified and adored by weak avaritious Men, whom ſome of the Writers in Alchymy ſeem to have drawn into Snares on purpoſe, as if intending their Prejudice and Diſquiet. Nor, if this Secret were out, could the Nature of Civil Government allow it to be practiſed by private Perſons, any more perhaps than Coining.

SECT. I.

Of the Definition of Alchymy.

MANY Definitions of this Art are found in the Writings of the Ancients; 'tis our preſent Deſign to conſider the Purport of ſuch Definitions. According to *Hermes*, "Alchymy is the Science of Body, "teaching how, by one thing, and "by one thing ſingly, to join the "more valuable Compounds toge- "ther, with Knowledge and Effect; "ſo as, by a natural Commixture, "to convert them into a higher "kind (*c*)." Another defines it, "the

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(*c*) This Definition is general, and ſuppoſes Alchymy a perfect Art, or even a Science. It is to be wiſhed that Natural Philoſophy was ſo far improv'd as to render ſuch a Definition juſt; for then Alchymy would conſiſt of a true Theory of Bodies, or a Knowledge of their Natures with regard to the *Elixir*; and a juſt Practice founded upon the Rules of Art. This ſeems to be

" the Science of converting all the " Metals into one another, by means " of an appropriated Medicine;" which Definition we alſo find in many Writings of the Philoſophers. Alchymy, therefore, is *a Science teaching how to make and procure a certain Medicine* (*d*), *called the Elixir, which being thrown upon Metals, or imperfect Bodies, reduces them to abſolute Perfection, even in the Inſtant of Projection* (*e*).

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be defining Alchymy from a Notion of what it ſhould be when perfected, rather than from what it is; *viz.* a few caſual Experiments, ill underſtood, and worſe digeſted, with relation to the Melioration of Metals and Minerals. The Author's own Definition is preciſe to the purpoſe.

(*d*) Tho' the Author here uſes the word *Medicine*, he no where, in this Piece, pretends that the *Elixir* is a Remedy, capable of curing all Diſeaſes; as ſome fanciful Writers have vainly aſſerted it would do. Our judicious Friar keeps cloſe to its Effects upon Metals, and metallic Matters; without ſtretching it farther.

(*e*) See Mr. *Boyle*'s Account of an *Anti-Elixir*, in the Preface to this Piece; and the Dialogue upon the *Degradation of Gold.*

SECT. II.

Of the Natural Principles producing Metals and Minerals.

WE next proceed to a full Deſcription of the natural Principles from whence Minerals are produced. And firſt, we are to obſerve that the Mineral Principles in Mines, are *Quickſilver* and Sulphur (*f*); and from thence all the different kinds of Metals and Minerals ariſe. But

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(*f*) We muſt here be cautious, leſt the Author ſhould adopt a faulty Theory; for if this ſhould prove the Caſe, all that is built upon it will be precarious at leaſt, if not utterly falſe. He plainly proceeds upon the ſuppoſed Truth, here laid down as a Foundation of his ſubſequent Reaſoning; ſo that it ought to be juſt and true: for our own part tho' it appears plauſible, we are not certain that it is adequate, or carefully deduced, as all Theory ſhould be, from juſt and well-weighed Matter of Obſervation and Experience: tho' it is eaſy from Reaſoning *à Priori*, and *à Poſteriori*, to render it probable.

But here we muſt remember, that Nature always propoſes, and endeavours to produce perfect Gold; whilſt the Supervention of different Accidents puts her out of her courſe, and transforms Metals; as is clearly expreſs'd in many Writings of the Philoſophers: for pure and impure Metals are generated according to the Purity or Impurity of the two Principles, Quickſilver and Sulphur (*g*): whence proceeds Gold, Silver, Tin, Lead,

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(*g*) Here again we muſt be upon our guard, for fear of a falſe Hypotheſis gliding in; for tho' this ſhould have been the Opinion of all the Philoſophers, yet if it is not ſtrictly true, and proved to be ſo, it ought never to be uſed in a Diſcourſe of this nature. But if any ſuch Error ſhould happen, as it is very difficult to avoid Errors in ſuch Reaſonings, let it be carefully remembered, that the making of the Experiment, deduced by juſt Reaſoning upon theſe Principles, may either countenance or overthrow the Doctrine. For, no Theory, or Hypotheſis, in Natural Philoſophy, can be good (unleſs by accident) that is not drawn from the Natures of Things; and even then it is never to be truſted, till fully verified by wary Experience. This Rule is of the utmoſt conſequence in Natural Philoſophy.

Lead, Copper, and Iron. As to the Nature of theſe Metals, that is, their Purity and Impurity, or their foul Superfluity and Defect, we lay down the following Particulars as true. (1.) *Gold* is a perfect Body, made of a pure, fix'd, clear, red Quickſilver; and a clean, fix'd, red, incombuſtible Sulphur; and is without any Defect. (2.) *Silver* is a pure and almoſt perfect Body, made of a pure, almoſt fix'd, clear and white Quickſilver; and of a ſimilar Sulphur: it wants a little Fixedneſs, the yellow Colour, and ſpecifick Gravity of Gold. (3.) *Tin* is a clean imperfect Body, made of a pure fix'd and unfix'd, clear, and externally white, but internally red Quickſilver; and a ſimilar Sulphur: it wants only farther Decoction and Digeſtion. (4.) *Lead* is an unclean and imperfect Body, made, in part, of a foul, unfix'd, and externally ſomewhat white, but internally a ſomewhat red Quickſilver,

ſilver, and a ſimilar combuſtible Sulphur: it wants Purity, Fixedneſs, Colour, and Ignition. (5.) *Copper* is an unclean and imperfect Body, made of an impure, unfix'd, earthy, combuſtible, dirty-red Quickſilver, and a ſimilar Sulphur: it wants Fixedneſs, Purity and Weight, and has too foul a Colour, and an incombuſtible Earth. (6.) *Iron* is an unclean and imperfect Body, made of an impure, too fix'd, combuſtible earthy, white and dirty-red Quickſilver, and a ſimilar Sulphur: it wants Fuſibility, Purity, and Gravity; and contains too much foul fix'd Sulphur, and combuſtible Earth (*b*). And

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(*b*) Theſe appear to be Alchymiſtical Definitions of the Metals; ſo that their Truth may be queſtioned in Natural Philoſophy, and common Chymiſtry. Thus, for inſtance, who has ſeen, or knows how to procure, the fine, clear, red Quickſilver; and the clear, fix'd, red, incombuſtible Sulphur of Gold? Or how can it be clearly demonſtrated, or proved to the Senſes, that Gold, or any of the Metals, is made of, contains, And theſe Particulars every Alchymiſt ought to obſerve.

SECT. III.

Of the neareſt Matter of the Elixir.

ENough has already been ſaid of the Generation both of the perfect and imperfect Metals: we now proceed to the Choice and Perfecting of the imperfect Matter. As it appears from the preceding Sections, that all Metals

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contains, or can be brought to afford, a true running Mercury? The common Natural Philoſophy teaches little of this Affair. But if you will believe the Alchymiſts, upon the ſtrength of this Axiom, that *every Artiſt is to be credited in his own Art*, theſe things are clear to them: but in all Caſes of this kind, it is beſt appealing to Experience; for without ſeeing the proper Trials, we can only have Opinion, without Certainty. Thoſe who deſire Light in this Affair ſhould, perhaps, rather conſult the Moderns than the Ancients. See *Becher*, *Boyle*, *Stahl*, and *Homberg*.

Metals proceed from Quickſilver and Sulphur; and that Impurity and Foulneſs corrupts them: We are next to conſider that ſince nothing ſhould be applied to Metals, but what is compoſed of, or proceeds from them; hence it clearly follows, that no extraneous Body, which has not its Origin from theſe two (Quickſilver and Sulphur) is capable of perfecting or tranſmuting them. It is therefore ſurprizing, that any ſenſible Men ſhould make choice of Animal or Vegetable Subſtances for this purpoſe: theſe being extremely remote; whereas mineral Subſtances are near. Nor are we to imagine that any one of the Philoſophers ſhould found his Art upon Bodies ſo far removed from a metallic Nature; unleſs it were by way of Similitude. But all Metals are made of the two foreſaid Bodies; nor can any thing elſe adhere to Metals, unite with them, or tranſmute them, that does not proceed

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Metals

contains, or can be brought to afford, a true running Mercury? The common Natural Philoſophy teaches little of this Affair. But if you will believe the Alchymiſts, upon the ſtrength of this Axiom, that *every Artiſt is to be credited in his own Art*, theſe things are clear to them: but in all Caſes of this kind, it is beſt appealing to Experience; for without ſeeing the proper Trials, we can only have Opinion, without Certainty. Thoſe who deſire Light in this Affair ſhould, perhaps, rather conſult the Moderns than the Ancients. See *Becher*, *Boyle*, *Stahl*, and *Homberg*.

Metals proceed from Quickſilver and Sulphur; and that Impurity and Foulneſs corrupts them: We are next to conſider that ſince nothing ſhould be applied to Metals, but what is compoſed of, or proceeds from them; hence it clearly follows, that no extraneous Body, which has not its Origin from theſe two (Quickſilver and Sulphur) is capable of perfecting or tranſmuting them. It is therefore ſurprizing, that any ſenſible Men ſhould make choice of Animal or Vegetable Subſtances for this purpoſe: theſe being extremely remote; whereas mineral Subſtances are near. Nor are we to imagine that any one of the Philoſophers ſhould found his Art upon Bodies ſo far removed from a metallic Nature; unleſs it were by way of Similitude. But all Metals are made of the two foreſaid Bodies; nor can any thing elſe adhere to Metals, unite with them, or tranſmute them, that does not proceed from theſe two (*i*): and hence it is juſtly inferr'd, that *Quickſilver and Sulphur are to be choſe as the Subject-matter of our Stone.* And as neither Quickſilver alone, nor Sulphur alone, can produce any Metal; but a Mixture of the two produces the different Metals reſpectively, and numerous Minerals; it is plain that a Mixture of the two muſt conſtitute our *Matter*. But our final Secret is of a deep and excellent Nature; for upon what neareſt approaching Mineral Subſtance are we to work? Suppoſe our Subject ſhould be choſe out of the vegetable Tribe; we muſt firſt reduce it to Mercury and Sulphur, by a long Digeſtion (*k*); but we

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(*i*) We are not certain, that this is univerſally true: the common Phoſphorus of Urine, which appears very remote from a metallic Nature, has ſurprizing Effects upon ſome Metals; and any fat Subſtance has an extraordinary Effect upon the Calces of others, by Fuſion.

(*k*) Some of the Alchymiſts declare, that the Matter of the Stone is to be found in every thing; in the Air, in Water, in Earth, and in all vegetable, we are excuſed from this tedious Operation; ſince Nature ſpontaneouſly offers us Quickſilver and Sulphur. If an animal Subject ſhould be pitch'd upon (as Blood, Urine, Hair, Eggs, *&c.*) here alſo we muſt reduce it to Mercury and Sulphur by Decoction; from which likewiſe we are excuſed. If middle Minerals (as Marcaſites, Vitriols, Alum, Borax, Tutty, Salts, *&c.*) were choſe; here alſo, according to our Precepts, Mercury and Sulphur muſt firſt be obtained from them by Decoction; where again we are excuſed. So, if Choice were made of any one of the ſeven volatile Minerals by itſelf, as Quickſilver alone, or Sulphur alone, or Quickſilver

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table, animal, and mineral Subſtances: from all which they pretend, that a running Mercury may be obtained by Art: which Notion has led many a Man a Wild-gooſe Chaſe; and yet ſome uſeful Diſcoveries have been made by the way. Thus, in particular, Phoſphorus was found by working upon Urine, for the Philoſophical Mercury.

ſilver and one of the two Sulphurs, or *Sulphur Vivum*, or Orpiment, yellow Arſenick, red Arſenick, or the like; ſtill we ſhould labour in vain; becauſe as Nature perfects nothing without an equal Mixture of both, ſo neither can we: and thus again we are excus'd; as having Quickſilver and Sulphur ready made to our hands, and brought to their own Nature. Laſtly, tho' we ſhould chuſe the two right Subjects, *viz.* Sulphur and Mercury, as we find them in Nature, yet even then we are to mix them in the right Proportion, which the Mind of Man is ignorant of; and afterwards digeſt, and coagulate them into a ſolid Maſs. Whence we are excus'd from taking both of them in their own ſeparate Natures; as not knowing the true Proportions; yet finding Bodies in which they are juſtly proportion'd, coagulated and united in the proper manner (*l*): Keep this Secret cloſe.

Gold is a perfect, maſculine Body, without any Superfluity or Diminution; and if, by being barely melted and mixed with imperfect Bodies, it could render them perfect, it would be the *Red Elixir*. Silver is a nearly perfect, female Body; and if, by bare common Fuſion, it could render imperfect Bodies nearly perfect, it would be the *White Elixir*; which it is not, nor can be; becauſe only Bodies more than perfect are ſo. And if this Perfection of Gold and Silver was communicable to imperfect Bodies upon Mixture, it could not render them perfect; but the original Per-

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(*l*) This appears to us a beautiful, and, on many Occaſions, an uſeful Method of Reaſoning, which, by ſome, is called *the Method of Rejection*; as being a Contrivance for ſingling out the thing we want, and driving it from among thoſe we do not want in an Enquiry; and then graſping it ſeparately: with a plain Alluſion to regular Hunting.

Perfection might thus rather be diminiſhed, or impaired. But if Gold and Silver were more than perfect; for example, in a double, quadruple, or hundred fold, *&c.* Proportion; then, indeed, the imperfect Bodies might be perfected by the Mixture. But as Nature always operates in the ſimpleſt Manner; the Perfection of theſe Metals is ſimple, inſeparable, and incommunicable by Mixture; otherwiſe they could not, to ſhorten the Work, be put by Art to the *Stone*, as a Ferment; but would then be reduced to their priſtine State, when the Sum of the Volatile exceeds the Sum of the Fix'd (*m*).

Gold,

(*m*) This may want a little Explanation; and perhaps is not quite clearly expreſs'd in the Original. It is here intimated, that to ſhorten the Proceſs for the *Elixir*; Gold or Silver being put into the Matter, will operate as a Ferment upon it, and thus tend to perfect it ſooner. This ſeems here ſuppoſed a known Fact; for the Confirmation of which it is aſſign'd as a Reaſon, that if the thing did not happen ſo, a different Con-

Gold, therefore, being only a perfect Body conſiſting of red, and bright Quickſilver, and a ſimilar Sulphur; we do not make choice of it for the Matter of the *Stone*, or the *Red Elixir*, on account of its being only ſimply perfect, (unleſs ingeniouſly depurated,) and already ſo ſtrongly digeſted and concocted by

Conſequence muſt follow, and the Gold and Silver thus put to the Matter of the Elixir, now in Digeſtion, remain unalter'd in their Nature, any farther than by being reduced to their former, or original Principles, ſuppoſe Sulphur and Mercury: but theſe being the component Parts of the Matter of the Elixir, the Operation could not hence be haſtened; becauſe the Addition then would amount to no more than the Addition of the like Quantity of the original Matter of the Elixir. Then follows the Reaſon why the Gold and Silver would be thus reduced to Sulphur and Mercury; *viz.* becauſe, the Sum of the Volatile would exceed the Sum of the Fix'd; which ſeems to intimate two Secrets in the Operation, *viz.* (1.) That the Matter of the Elixir is made volatile by the Digeſtion; and (2.) That the Addition of the Gold and Silver ſhould not be large, in proportion to the Matter operated upon, if the Work is deſign'd to be haſtened by this means.

natural Heat, as is ſcarce to be imitated, upon Gold and Silver, by our artificial Fires. But tho' Nature may perfect a thing, yet ſhe cannot intimately purge, purify, and exalt it; as operating barely upon what ſhe finds. If, therefore, we ſhould chuſe Gold or Silver for the Matter of our *Stone*, we could ſcarce find a Fire ſufficient to operate upon them: and though we could, yet by reaſon of their great Compactneſs, and ſtrong natural Texture, we ſhould not intimately purify and exalt them: whence we are excuſed from taking Gold for the *Red*, and Silver for the *White Elixir*; eſpecially ſince we may find a Thing, or Body, conſiſting of as pure, or even purer Sulphur and Mercury than thoſe; and upon which Nature has operated but very little, or the leaſt poſſible: at the ſame time this Body may by our artificial Fire, and the Experience of our Art, and a Continuation of the ingenious Proceſs, be brought to its due Concoction, Purity, Colour and Fixedneſs.

A Matter, therefore, is to be choſe, (1.) *containing a clean, pure, clear, white and red Mercury, not yet brought to its Perfection; but* (2.) *equally and proportionably mix'd, and duly united with a ſimilar Sulphur; and* (3.) *thus coagulated into a ſolid Maſs,* (4.) *ſo as that by our Prudence and Ingenuity, and the Uſe of the common artificial Fire, they may both be reduced to their intimate Purity, and* (5.) *make ſuch a Thing, as after the Work is finiſhed, may prove a thouſand-thouſand times ſtronger and more perfect than the ſimple Ingredients digeſted by the Heat of Nature.* Be wiſe: for if you have any Subtility or Ingenuity to underſtand the manifeſt Proof and open Declaration here given of the Matter of the *Stone*;

you

you will reap that Pleaſure, which is the whole End and Scope of the Philoſophers (*n*).

SECT.

(*n*) Here we are come to the principal Part of the Myſtery, *viz.* the finding of the very Subject-Matter, whereof the *Elixir* is to be made. And if our Friar has dealt ingenuouſly with us, ſcarce any one vers'd in the Knowledge of Minerals, can help fixing his Thoughts directly upon *Native Cinnabar*, as the Thing here plainly intended, and ſingled out from all the reſt, by the Method of Rejection. In one light, or other, this Subſtance appears to anſwer all the Characters; as its being a *Stone*, containing a clear white and red Sulphur, and Mercury; at leaſt white after Separation, but red in the Compound, *&c.* which Properties ſeem to diſtinguiſh this Subſtance from all others, even from Antimony itſelf. The *Native Cinnabar* is very different from the Artificial, as thoſe know who have examined them both by chymical Experiments. *Native Cinnabar* is a hard, ponderous, metallick, and beautifully red ſtony Subſtance, that breaks, by a proper Force applied, into ſhining, bright, angular Pieces. It nearly reſembles another curious, but uncommon metallick Subſtance, which upon a ſlight Fuſion affords a large Proportion of Silver. This *Cinnabar* ſeems to be improperly call'd the Ore of Mercury; as, beſides other reaſons, being much more valuable, and bearing a higher Price than Quickſilver; yet affording, according to its difference, from ſeven to fourteen Ounces of true running

SECT. IV.

Of the Proceſs, and regulating the Fire.

I Doubt not, but the Reader, unleſs totally void of Penetration, has from the above Deſcription found out the true Matter of the *Philoſopher's Stone*; upon which the Operation

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running Mercury, in a Pound Averdupoiſe. The Sulphur remaining behind, after this Separation, ſeems alſo to differ from the common; and its Nature perhaps is not hitherto ſufficiently known. This Subject at leaſt is curious; and if well examined by proper Experiments, might let great Light into the Affair of Metals. Thoſe who are acquainted with the true Way of making the red Precipitate *per ſe*, will perhaps be moſt likely to treat this Subject properly. For that Operation differs little from the Proceſs for making the *Philoſopher's Stone*, as deſcribed by our Author; whether we regard the Matter, the Veſſel, the Furnace, the Fire, the Changes of Colour, and perhaps the Time; eſpecially if ſomething nobler than a bare red Precipitate *per ſe*, be expected. This is nearly all that we certainly know of the Matter.

ration of Alchymy is to be performed, when we would render imperfect Bodies perfect ; by means of others that are *more than perfect.* And ſince Nature affords us only imperfect Bodies along with perfect ones ; we muſt by our own Art and Labour bring the Matter already pointed out to a more than perfect State. And if we are ignorant of the Manner of working, let us ſee how Nature frequently operates in the producing of Metals. May we not obſerve in Mines that a groſs Fluid is digeſted and inſpiſſated, by the continual Heat found in Mountains of Minerals ; till, in tract of time, it turns to Quickſilver ? That the Fatneſs of the Earth, by the ſame Digeſtion and Heat, turns to Sulphur ? That the ſame Heat continually acting upon theſe two Subſtances, according to their Degree of Purity or Impurity, produces all the Metals, as was above obſerved ? And that Nature makes them all, as well the perfect, as the imperfect, by bare Digeſtion (*o*)? What Frenzy is it then to attempt the perfecting of Metals by foreign, gloomy, or fantaſtical Operations? A certain alchymiſtical Writer "denounces Woe to thoſe who would "excel Nature, and make Metals "more than perfect, by a new Method, or giddy Proceſs, coin'd in "their own ſenſeleſs Brain: when "the God of Nature has ſhewn us a "direct Way, by continued Digeſtion, which they either know not, "or will not ſtoop to imitate." Again, this Author tells us, that "Fire and *Azoth* (*p*) are alone ſufficient," that "Heat perfects all things," that "we ſhould Digeſt, Digeſt, Digeſt, and not be weary of digeſting;" that "our Fire ſhould be mild and gentle at firſt, and continue

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(*o*) It may well deſerve to be examined how far theſe Particulars are true; or how far they fall ſhort of Nature.

(*p*) Or the *Stone*.

tinue burning equably every day, without increaſing; otherwiſe the Operator would be a Loſer," that "we ſhould be patient and perſevere;" that "we ſhould grind it ſeven times;" that "it is ground by Fire;" that "the whole Magiſtery is finiſhed with one thing; *viz. the Stone* (*q*), in one Veſſel; and in one Way, *viz.* Digeſtion;" and laſtly, that "this Operation reſembles the Growth of Man; for as an Infant is firſt fed with light Nouriſhment, but as he grows up, with ſtronger; ſo this Magiſtery at firſt requires a gentle Fire; which is conſtantly to be uſed in the Beginning of all Digeſtions." And tho' we never ſpeak but of a ſlow Fire; yet we judge it ſhould be a little, and by ſmall Degrees, increaſed, after the Beginning, to the End of the Operation.

(*q*) The Subject-Matter of the Elixir is frequently call'd by alchymiſtical Writers, the *Stone*; tho' the ſame Name, in a higher ſenſe, is given to the Elixir itſelf.

SECT. V.

Of the Nature of the Veſſel and Furnace.

HAving aſſign'd the End, and Manner of working, we proceed to the *Veſſel* and the *Furnace*; and ſhall ſhew of what Materials they are to be made. Since Nature digeſts Metals in the Mines by natural Heat; this Digeſtion cannot be perform'd without a proper Veſſel. And if we propoſe to follow Nature in our Operation, why ſhould we not uſe her Veſſel? Firſt, therefore, let us ſee what is the Place where Metals are generated. It plainly appears that at the Bottoms of Mountains wherein Minerals are found, there is a continued equable Heat, whoſe Nature it is to be conſtantly aſcending; and in its Paſſage every where dries up and condenſes, into Quickſilver the thick groſs Liquor it meets with lurking in the Caverns of the Earth, or Veins of the Mountain: and if the mineral Fatneſs found in the ſame Place, ſhould run and be collected in Veins, by means of the Earth thus heated; it will trickle down the Sides of the Mountain, and become Sulphur. We alſo find, as was obſerv'd above, that when this Sulphur form'd of the Fatneſs of the Earth, meets with Mercury, after the manner before-mention'd, then a thick mineral Liquor is form'd of the two. And thus, in length of time, the different Metals are produced, according to their difference of Place, by the equally continued Action of Heat in the Mountain: for a permanent Heat is always found in the Places where Minerals are produced. And here we may properly obſerve that the Mine, or Mineral-Mountain, is every way ſhut up externally, or contained within a ſtony Cruſt, ſo as to prevent the Heat from eſcaping; otherwiſe no Metals would be generated. If, therefore, we would imitate Nature, it follows that we ſhould build our Furnace after the manner of theſe Mountains; not indeed as to Size, but with regard to the continual Heat; ſo as that the Fire may find no Vent when it aſcends, but the Heat be reverberated upon the Veſſel containing the Matter of the *Stone*, cloſely confin'd.

This Veſſel ought to be round, and have a ſlender Neck; its Matter ſhould be Glaſs, or ſome proper Earth of the Nature or Cloſeneſs of Glaſs; and the Mouth of it ſhould be ſealed down with a ſimilar Matter, or Cement (*r*). And as in Mines

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(*r*) The Alchymiſts for this purpoſe generally uſe what are called *Glaſs-Eggs*; and after the Matter is put in, they ſeal them up hermetically.

But

the Fire does not immediately touch the Matter of the Sulphur and Mercury, but the Earth of the Mountain every where interpoſes; ſo our Fire ſhould not immediately touch the Veſſel that holds our Matter, conſiſting of the ſaid two Bodies united; but this Veſſel ſhould be contained in another Veſſel, cloſed in the ſame manner; ſo as that the temperate Heat of the Furnace may thus act upon the Subject-Matter both above, below, and wherever elſe it is convenient and beſt. And hence *Ariſtotle* ſays, in his *Lumen Luminum*, that "the Mercury "ſhould be digeſted in a three-fold "Veſſel of the hardeſt Glaſs, or "what

But if the included Air be not firſt rarified, or exhauſted, or the Glaſs heated, before the ſealing; or if any conſiderable Quantity of Air, or exploſive Vapour ſhou'd be generated in the Operation; or if the Fire ſhou'd be too fierce; or laſtly, if the Glaſs ſhou'd touch the hot Iron-Plate of the Furnace, it might eaſily burſt, and fruſtrate the Deſign.

" what is ſtill better, of Earth which " has a glaſſy Nature.".

SECT. VI.

Of the Accidental and Eſſential Colours that appear in the Work.

HAving found the Matter of the *Stone*, the true Manner of working upon it will be known. By this Manner, or Proceſs, the *Stone* in digeſting, often changes of different Colours; whence it has obtained as many Names; which have been varied by Philoſophers, according to the Diverſity of Colours appearing in the Work. The firſt Part of the Operation is called Putrefaction, when the *Stone* appears black. Hence a certain Writer ſays, " when you find " it black, remember that Whiteneſs is concealed under this ſubtile

"Blackneſs, from which it muſt be "extracted (*s*)." After Putrefaction it becomes red, but not of a true red: for as another Writer ſays, "it "often grows red, and often yellow, "and is often coagulated before it "becomes truly white." "Again, it alſo diſſolves itſelf, coagulates itſelf, putrefies itſelf, colours itſelf, mortifies itſelf, revives itſelf, blackens itſelf, whitens itſelf, and makes itſelf red and white." It alſo becomes green; whence another ſays, "Digeſt "it till a green Colour appears; "which ſhews its Life." Before it grows white, it ſhews all the Colours of the *Peacock's Tail* (*t*); whence another ſays, "that all imaginable Colours appear before it comes to perfect Whiteneſs;" hence another tells

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(*s*) *Viz.* by barely continuing the Digeſtion.

(*t*) It may be proper to obſerve here, that Quickſilver digeſted *per ſe*, as for making the Red Precipitate, turns into a black, white, yellow, or red Powder, as the ſkilful Operator pleaſes to have it.

tells us, "when it is ſo clearly digeſted " as to ſhine like Fiſh's Eyes, the " End or Utility is to be expected; " and then the Matter coagulates into a round *Stone.*" Again, another ſays, " when you find the Whiteneſs ſupereminent in the Veſſel, " reſt aſſured that Redneſs is concealed in that Whiteneſs; and muſt therefore be extracted by Digeſtion, till the whole becomes Red. But a certain grey or Aſh-colour will interpoſe in its paſſing from white to red; of which 'tis ſaid, " after the " Whiteneſs appears, no Error can " be committed; for by increaſing " the Fire you will come to grey;" of which another ſays, " do not deſpiſe the Grey, for the Lord will " liquify it." And then, finally, " the King is crown'd with his red " Diadem, *if the Lord ſees fit* (*u*)."

SECT.

(*u*) This is the uſual Strain of the Alchymiſts, who moſt of them pretend to great Piety, Purity of Heart, and Reſignation to the Will of God.

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SECT. VII.

Of Projection, or the Manner of perfecting the imperfect Metals by the STONE.

I Have now fully perform'd my Promiſe, and ſhewn the Way of making the *great Magiſtery* for the *high Elixir*, both the red and the white (*x*): it only remains in the laſt Place

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Many of them were Monks, or Religious by Profeſſion.

(*x*) Are both the *red* and *white Elixir* to be made of the ſame individual Subject? Some, for the *white Elixir*, would perhaps chuſe *Native Antimony*, or rather *Native Biſmuth*, than *Native Cinnabar*. But the Proceſs it ſeems is to be the ſame; whether the Subject-Matter be ſo or not. The Effects of long continued Digeſtions are very extraordinary, and not ſufficiently known. It is greatly to be wiſh'd they were more practiſed; for the Improvement of Natural Philoſophy. Who would have ſuſpected, that Quickſilver, by being barely digeſted, without any Addition, ſhould turn to a fine red Powder, as we ſee in making the Precipitate *per ſe*?

And

Place to deſcribe the Manner of *Projection*, which is the Completion of the Work, and the expected Source of Joy. Now, as the *Red Elixir* gives a yellow Colour almoſt to Infinity; and tranſmutes all the Metals to pure Gold; ſo the *White Elixir* whitens in the ſame high Degree, and makes any Metal perfectly white. But we are to remember that ſome Metals are farther removed from, and that ſome approach nearer to Perfection, than others; and, therefore, though every Metal may be perfected by the *Elixir*; yet ſuch as are of themſelves nearer to Perfection will be more compleatly perfected, and with greater Facility and Diſpatch, and with a leſs Proportion of the *Elixir*, than ſuch as are very remote from Per-

And M. *Homberg* declares, upon his own Experience, that by long Digeſtion it becomes more fix'd, more ponderous, and affords a ſmall Proportion of ſolid Metal. See *Memoir. de l'Acad. R. An.* 1705, &c.

fection. And ſince we can eaſily find Metals that approach near to Perfection, we may here reject all ſuch as are far removed from it. And what Metals approach to, or are farther removed from Perfection, is already juſtly determin'd, and ſufficiently explain'd, if the Reader has any Ingenuity. And there is no doubt to be made, but he who has skill enough to ſee ſo far into this *Mirror* of mine, as to know how, by his own Induſtry, to find the true Matter of the *Stone*, will eaſily underſtand upon what Bodies the *Elixir* is to be caſt, in order to render them perfect. For, thoſe who have preceded me in this Art, and found it by their own Philoſophy, plainly demonſtrate and point out the ſhort and direct Way to this End, when they ſay, " that Nature contains Nature." Nature conquers " Nature." Nature rejoices to meet " its own Nature, and is changed in-

" to other Natures." Every " Like " approves its Like, (*y*), for Similitude " is the Cauſe of Friendſhip ;" upon which Subject many Philoſophers have given us a valuable Secret. Again, " this we are to underſtand, " that a Soul ſoon enters into its own " Body, when that Soul is not al- " ready join'd to a foreign Body." Elſewhere 'tis ſaid, " that a Soul " quickly enters its own Body ; but " to attempt the introducing of it in- " to a foreign Body is a fruitleſs La- " bour : for *Affinity is a ſhining Star* to

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(*y*) Theſe and the like Expreſſions ſeem to aim at being Summaries, or collective Expreſſions of *General Truths*, which, of all the Notions we have, are the moſt agreeable, and moſt uſeful to philoſophical Minds. But, however uſeful and agreeable ſuch ſummary Expreſſions may be, the Alchymiſts appear to have been little acquainted with the ſure Rules of forming them : the Expreſſions here mention'd may perhaps, under due Reſtriction, be allow'd as tolerably juſt ; but rigid Enquirers will lay no great Streſs upon them, till they are compared with all the apparent particular Exceptions that can be produced, or all the different Indications on the other ſide of the Queſtion.

to the Wiſe (z.) For as Bodies here by our Treatment (a) become ſubtile, or to the Senſes incorporeal, and on the contrary, ſuch incorporeal things become corporeal; and in the Completion, the whole Body becomes as a ſpiritual fix'd Subſtance; and as the *Elixir* thus made, both the white and the red, is plainly of a ſubtile, or almoſt ſpiritual Kind, being highly prepared and exalted far above its own Nature; hence it is no wonder it ſhould not mix with a groſs Body, upon which it is barely thrown, whilſt the Body is in Fuſion: for it would be monſtrous thus to project the *Elixir* upon ten hundred thouſand

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(z) Alluding ſuppoſe to the Star in the *Eaſt*; which led the Wiſe-Men to our Saviour. It might otherwiſe be call'd *the Key to Nature*; as what we want moſt in Natural Philoſophy is to know the RELATIONS, or Similitudes and Diſſimilitudes which all Bodies have to one another: that is the Effects of Individuals upon each other.

(a) *Viz.* by Digeſtion.

ſand times its own Weight (*b*), and expect it to penetrate and tranſmute ſuch a Maſs in an Inſtant. I will here, therefore, declare the great Secret. Firſt, one Part of the *Elixir* is to be mix'd with a thouſand Parts of the nearly approaching Body, whilſt the whole is cloſely confined in a proper Veſſel, placed in a *Fixing-Furnace* (*c*), with a gentle Fire at

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(*b*) It ſeems to be a Notion among the Alchymiſts, that there are ſeveral Degrees, or Orders, of the Elixir, up to which it is raiſed according to the different lengths of time employ'd in the Digeſtion: ſo that perhaps a long Operation may, according to their Doctrine, be requiſite to advance the *Stone* ſo high, as that it ſhall tranſmute a thouſand or more times its Weight of Silver, ſuppoſe, into Gold. It would prove a curious Experiment, and ſufficiently reward the Operator's Labour, if it was certain that, in the ſpace of a Year, the Elixir might be raiſed ſo high by bare Digeſtion, as to tranſmute only ten times its weight of any imperfect Metal into Gold.

(*c*) The Perſons acquainted with chymical Furnaces will readily know the kind of Furnace here meant; 'tis what may be otherwiſe called a *Cementing-Furnace*; and the Operation is plainly directed to be perform'd after the manner of *Cementation*, in a cloſe Veſſel.

at the Beginning, but conſtantly increaſing the Heat for three Days, till the whole is inſeparably mix'd. And this is the *three Days* Work. Then, for the final Operation, one Part of the Matter thus mix'd, is to be thrown upon another thouſand Parts of any nearly approaching Body. And this is but the Work of one Day, one Hour, or even of one Moment (*d*). For which, the All-wonderful God be ever praiſed!

(*d*) Tho' the foregoing Piece will undoubtedly appear methodical, clear, and rational, in compariſon of the numerous Writings of moſt others upon the Subject; yet perhaps it may admit of a Doubt, whether the Author himſelf ever made the Experiment, which he here ſo accurately deſcribes with its Phænomena, Circumſtances, Reſult and Effect. We can conceive it eaſy for a Man of his great Talents, extenſive Reading, and clear Head, to have decypher'd the Alchymiſts; to have culled out the choiceſt Flowers of their Works; and to have digeſted them in the Order they here ſtand: ſo as to have reaſon'd upon the Experiment, without having ever tried it; at leaſt with Succeſs, ſince he does not ſay that he has. And here every Man's Judgment ſhould be left free: But to reconcile ſuch a fictitious Procedure in this Author, with the great and candid

Mind, which appears in his other Writings, may be found difficult; tho' it muſt be acknowledg'd that he wrapt up his Diſcovery of Gun-Powder in a kind of Cypher; tho' for this he might have a good Reaſon, as apprehending its deſtructive Conſequences. But, as in proſecuting any natural Enquiry, when we have, in the beſt manner we can, reaſon'd up to an Experiment, and render'd it proper and neceſſary to be tried, the next Step is to make that Experiment, without which we are not able to proceed farther upon any adequate Grounds: So, in the preſent Caſe, we can ſee no Harm or Danger in ſubmitting this Experiment to a fair Trial; ſince it appears to be neither difficult, extreamly tedious, nor expenſive; eſpecially if an accurate Operator, with proper Aſſiſtants, be concerned in the making of it. We cannot, therefore, but recommend it to the Trial of the Curious, tho' we have never made it ourſelves; and could wiſh it were tried in different Places, by different Perſons, who ſhould publiſh the Reſult, for the Benefit of Natural Philoſophy, and the clearing up of a Doubt, which nothing but the uniform Failure or Succeſs of judicious and accurate Experiments can ever remove. To facilitate the Work, we ſhould not quit the Subject without reducing the Proceſs to a narrow Compaſs, that the Mind may ſee it at one View. (1.) Infinite Search is here cut off, as we are plainly brought to ſome firſt Matter from whence to prepare the Elixir. (2.) This Matter is to be found in Mines, and was once in the Form of a Fluid, a Vapour, or thick Liquor, but gradually condenſed, or digeſted into a Subſtance containing a Mercury and a Sulphur. (3.) Whether this Matter be

Cinnabar, *Biſmuth*, *Antimony*, or any other Matrix, or Mother of Metals; 'tis to be taken *native*, as found in the Mines, and being firſt perhaps reduced to a ſubtile Powder by Trituration; a proper Quantity of it, as from an Ounce to a Pound, (in proportion to the Size of the Veſſel, and the Furnace employ'd) is to be put into a round Veſſel of vitrifiable Earth, or ſtrong green Glaſs, with a long Stem, firmly clos'd at the Top, either hermetically, or by a proper Luting. (4.) The Veſſel is now to be put into another or two of Earth, and ſet in the Sand-bed of a Digeſting Furnace, or of the common Athanor; which is no more than a Sand-heat, ſo contrived, with a Tower for the Fewel, as that the Fire may burn equable, ſlow and ſoft for a long time, without much trouble. (5.) In this State the Veſſel is to be kept, without being removed from the Furnace; the Operator having nothing more to do than to keep up the Heat, and obſerve at times (if this can be done conveniently, without obſtructing the Proceſs, or cooling the Matter) what paſſes in the Glaſs, or what Changes of Colour happen to the Matter upon continuing the Digeſtion for a conſiderable Length of Time, till the Operation is finiſhed, and the Elixir made fit for Projection; the Manner of which is clearly, and conciſely deſcrib'd by *the Author*.

F *S.*

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